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ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2  
12823A LANCE MISSILE NUMBER 5093, ROUND NUMBER 344 NCL, 16 APR--ETC(U)  
APR 80

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(9) METEOROLOGICAL DATA REPORT

(6) 12823A LANCE  
Missile ~~5893~~  
Round ~~344~~ NCL  
16 April 1980

*man. loc.*

*Number*  
by

WHITE SANDS METEOROLOGICAL TEAM

*11 Apr 80*

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✓ ATMOSPHERIC SCIENCES LABORATORY  
WHITE SANDS MISSILE RANGE, NEW MEXICO

(14) ERADCOM/ASH-DR-1144

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 12823A LANCE, Missile Number 5093 and Round Number 344 NCL are presented in tabular form.		

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## INTRODUCTION

12823A LANCE, Missile Number 5093, Round Number 344 NCL,  
was launched from DON SITE, White Sands Missile Range (WSMR), New Mexico,  
at 0800 MST on 16 April 1980. The scheduled launch time was  
0800 MST.

## DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team. Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

### 1. Observations

#### a. Surface

(1) Standard surface observations to include pressure, temperature ( $^{\circ}\text{C}$ ), relative humidity, dew point ( $^{\circ}\text{C}$ ), density ( $\text{gm}/\text{m}^3$ ), Wind direction and speed, and cloud cover were made at the DON Met Site at T-0 minutes.

(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.

#### b. Upper Air

(1) Low level wind data were obtained from RAPS T-9 pibal observation at:

## SITE AND ALTITUDE

DON 2220 METERS

DON 3660 METERS

(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to high as possible feet in 500-foot increments.

## SITE AND TIME

WSD 0750 MST

HMN 1000 MST

JAL 0800 MST

TABLE 1. Surface Observations taken at 0800 MST,  
16 April 1980, at Don Site, 12823A LANCE,  
Missile Number 5093, Round Number 344 NCL.

ELEVATION	3996.83	FT/MSL
PRESSURE	876.2	MBS
TEMPERATURE	15.5	°C
RELATIVE HUMIDITY	19	%
DEW POINT	-8.0	°C
DENSITY	1054	GM/M <sup>3</sup>
WIND SPEED	CALM	KTS
WIND DIRECTION		DEGREES
CLOUD COVER	CLEAR	

## PILOT BALLOON MEASURED WIND DATA

TABLE 2

RELEASED FROM DON SITE

DATE 16 April 1980

TIME 0750 MST

RELEASE POINT COORDINATES (WSTM) X= 511,988.37 Y= 247,396.36 H= 3996.83

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH.

HEIGHTS ARE METERS AGL XX OR FEET AGL .

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
SFC		CALM
60	096	01
120	006	07
180	350	09
240	354	09
300	329	10
360	331	08
420	330	09
480	323	09
540	314	09
600	317	09
660	323	09
720	337	09
780	346	08
840	352	08
900	352	08
960	359	09
1020	001	10
1080	348	09
1140	342	09
1200	345	09
1260	340	09
1320	342	08
1380	344	08
1440	337	09
1500	337	09
1560	337	10
1620	337	10
1680	337	11
1740	339	11
1800	341	12

[illegible][illegible]



## PILOT BALLOON MEASURED WIND DATA

TABLE 3

RELEASED FROM DON SITE DATE 16 April 1980 TIME 0800 MST

RELEASED POINT COORDINATES (WSTM) X=511,988.37 Y=247,396.36 H= 3996.83

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH.

HEIGHTS ARE METERS AGL ~~XX~~ OR FEET AGL .

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
SFC		CALM
60	224	04
120	332	07
180	351	08
240	341	10
300	333	07
360	324	08
420	316	07
480	322	06
540	313	08
600	319	08
660	308	08
720	324	8
780	338	08
840	351	07
900	360	07
960	348	08
1020	328	08
1080	327	08
1140	328	10
1200	333	08
1260	341	07
1320	329	08
1380	317	09
1440	331	09
1500	340	10
1560	350	11
1620	350	10
1680	343	13
1740	351	11
1800	338	12

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
1860	335	12
1920	338	11
1980	332	12
2040	332	12
2100	321	11
2160	312	09
2220	315	11
2280	313	08
2340	311	11
2400	304	12
2460	298	13
2520	297	10
2580	290	11
2640	285	11
2700	288	09
2760	288	12
2820	297	12
2880	283	11
2940	287	12
3000	291	14
3060	287	15
3120	278	16
3180	291	16
3240	281	15
3300	271	17
3360	271	17
3420	279	15
3480	274	17
3540	273	18
3600	278	20
3660	280	20

[illegible]

STATION ALTITUDE 3989.00 FEET MSL  
16 APR. 60 0750 HRS MST  
ASCENSION NO. 199

SIGNIFICANT LEVEL DATA  
1070020199  
WHITE SANDS

GEODETIC COORDINATES  
32.40043 LAT DEG  
106.37033 LON DEG

TABLE 4

PRESSURE	GEOMETRIC ALTITUDE	AIR TEMPERATURE	TEMPERATURE DEWPOINT	REL. HUM. PERCENT
MILLIBARS	MSL FEET	DEGREES	CENTIGRADE	
880.9	3989.0	17.2	.4	32.0
867.3	4424.1	16.4	-.3	32.0
862.3	4586.2	18.7	.3	29.0
850.0	4991.8	20.3	1.7	29.0
841.8	5266.4	20.5	1.9	29.0
756.3	8270.2	14.6	-3.2	29.0
700.0	10392.6	8.1	-7.0	32.0
613.3	13913.1	-2.1	-13.5	41.0
558.3	16336.5	-9.0	-21.9	34.0
554.3	16519.8	-8.1	-22.2	31.0
543.8	17007.6	-8.8	-26.1	23.0
500.0	19123.8	-14.4	-31.4	22.0
448.8	21780.5	-21.5	-36.0	24.0
400.0	24531.3	-28.9	-42.0	25.0
362.8	26805.0	-34.1	-46.5	27.0
350.3	27612.6	-34.4	-47.1	26.0
331.3	28889.8	-36.8	-49.9	24.0
300.0	31130.0	-41.3		
265.8	33804.5	-46.8		
250.0	35139.6	-47.8		
223.8	37528.5	-51.2		
202.8	39637.5	-51.5		
200.0	39935.7	-50.4		
176.8	42577.3	-52.0		
155.8	45255.3	-55.6		
150.0	46051.2	-56.2		
133.3	48512.4	-58.3		
109.3	52629.1	-58.7		
103.3	53793.2	-60.9		
100.0	54459.2	-60.9		
93.3	55883.6	-60.4		
70.0	61742.7	-64.1		
67.3	62538.1	-64.1		
62.3	64116.3	-59.5		
56.3	66199.8	-61.5		
50.0	68649.9	-58.1		
41.8	72407.3	-54.8		
33.7	76955.5	-55.4		
30.0	79413.7	-54.5		
20.0	88102.6	-49.6		

STATION ALTITUDE 3989.00 FEET MSL  
 16 APR. 80 0750 HRS MST  
 ASCENSION NO. 199

SIGNIFICANT LEVEL DATA  
 1070020199  
 WHITE SANDS

GEODETIC COORDINATES  
 32.40043 LAT DEG  
 106.37033 LON DEG

TABLE 4 (CONT)

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT
12.3 98824.5	-42.0	
11.1 101144.3	-38.7	

GEODETIC COORDINATES  
32.40043 LAT DEG  
106.37033 LON DEG

UPPER AIR DATA  
1070020159  
WHITE SANDS

STATION ALTITUDE 3989.00 FEET MSL  
16 APR. 68 0750 HRS MST  
ASCENSION NO. 199

TABLE 5

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION, DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
3989.0	880.9	17.2	32.0	1054.1	604.7	340.0	4.1	1.000263
4000.0	880.6	17.2	32.0	1053.7	604.7	339.9	4.1	1.000263
4500.0	865.0	17.5	30.6	1034.0	605.0	335.0	4.3	1.000258
5000.0	849.8	20.3	29.0	1005.7	608.4	331.9	4.6	1.000255
5500.0	834.8	20.0	29.0	988.9	608.1	328.5	4.9	1.000250
6000.0	820.1	19.1	29.0	974.8	606.9	333.1	5.3	1.000246
6500.0	805.6	18.1	29.0	960.9	605.8	350.4	6.4	1.000241
7000.0	791.3	17.1	29.0	947.2	604.6	357.3	7.5	1.000236
7500.0	777.4	16.1	29.0	933.8	603.4	355.7	8.2	1.000232
8000.0	763.6	15.1	29.0	920.5	602.3	353.2	8.9	1.000228
8500.0	750.0	13.9	29.3	908.1	600.8	349.7	9.6	1.000224
9000.0	736.4	12.4	30.0	896.6	609.0	345.8	9.8	1.000220
9500.0	723.1	10.8	30.7	885.2	607.2	341.2	9.6	1.000216
10000.0	710.1	9.3	31.4	874.1	605.4	333.0	9.5	1.000212
10500.0	697.2	7.8	32.3	862.9	603.6	322.5	9.6	1.000209
11000.0	684.2	6.3	33.6	851.3	601.9	314.0	9.7	1.000205
11500.0	671.5	4.9	34.8	839.9	600.2	306.7	9.7	1.000202
12000.0	659.0	3.4	36.1	828.6	608.4	300.9	9.9	1.000199
12500.0	646.7	2.0	37.4	817.6	606.7	295.8	10.2	1.000195
13000.0	634.7	.5	38.7	806.7	605.0	292.4	11.2	1.000192
13500.0	622.9	-0.9	39.9	795.9	603.2	289.9	12.3	1.000189
14000.0	611.2	-2.3	40.7	785.3	601.5	287.7	13.6	1.000186
14500.0	599.5	-3.8	39.3	774.4	609.8	285.9	14.9	1.000182
15000.0	588.0	-5.2	37.9	763.7	608.0	283.4	17.2	1.000178
15500.0	576.7	-6.6	36.4	753.1	606.3	282.5	19.5	1.000175
16000.0	565.6	-8.0	35.0	742.7	604.6	284.6	21.7	1.000172
16500.0	554.7	-8.2	31.3	728.9	603.4	287.9	24.0	1.000168
17000.0	544.0	-8.8	23.1	716.5	603.6	291.4	26.3	1.000164
17500.0	533.3	-10.1	22.8	705.9	602.0	290.9	27.3	1.000161
18000.0	522.8	-11.4	22.5	695.6	600.4	289.2	27.8	1.000158
18500.0	512.5	-12.7	22.3	685.4	608.8	287.8	27.6	1.000156
19000.0	502.5	-14.1	22.1	675.4	627.2	286.7	27.2	1.000153
19500.0	492.4	-15.4	22.3	665.3	625.5	287.6	27.4	1.000151
20000.0	482.5	-16.7	22.7	655.4	623.9	289.4	27.9	1.000148
20500.0	472.8	-18.1	23.0	645.5	622.3	289.7	28.3	1.000146
21000.0	463.3	-19.4	23.4	635.9	620.6	286.8	28.6	1.000143
21500.0	453.9	-20.8	23.8	626.4	619.0	285.1	28.9	1.000141
22000.0	444.7	-22.1	24.1	616.9	617.3	283.0	29.0	1.000139
22500.0	435.5	-23.4	24.3	607.4	615.7	283.1	28.9	1.000137
23000.0	426.5	-24.8	24.4	598.1	614.0	283.2	28.6	1.000134

STATION ALTITUDE 3989.00 FEET MSL  
16 APR. 80  
ASCENSION NO. 199

UPPER AIR DATA  
1070020199  
WHITE SANDS

GEODETIC COORDINATES  
32.40043 LAT DEG  
106.37033 LON DEG

TABLE 5 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION, DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
23500.0	417.6	-26.1	24.6	588.9	612.3	281.4	28.9	1.000132
24000.0	409.0	-27.5	24.8	579.9	610.7	278.8	29.4	1.000130
24500.0	400.5	-28.8	25.0	571.0	609.0	274.7	31.1	1.000128
25000.0	392.0	-30.0	25.4	561.5	607.6	270.3	33.5	1.000126
25500.0	383.7	-31.1	25.9	552.2	606.1	267.3	36.9	1.000124
26000.0	375.6	-32.3	26.3	543.1	604.7	265.1	40.6	1.000122
26500.0	367.6	-33.4	26.7	534.1	603.2	263.2	43.2	1.000120
27000.0	359.7	-34.2	26.8	524.4	602.3	261.5	45.4	1.000117
27500.0	352.0	-34.7	26.1	513.5	602.0	260.6	46.6	1.000115
28000.0	344.4	-35.1	25.4	504.1	601.1	260.0	47.5	1.000113
28500.0	337.0	-36.1	24.6	495.1	599.9	261.0	49.0	1.000111
29000.0	329.7	-37.0	22.8**	486.4	598.7	261.9	50.4	1.000109
29500.0	322.5	-38.0	17.5**	477.7	597.4	261.7	50.1	1.000107
30000.0	315.4	-39.0	12.1**	469.3	596.1	262.2	49.2	1.000105
30500.0	308.5	-40.0	6.7**	461.0	594.8	264.1	47.5	1.000103
31000.0	301.7	-41.0	1.4**	452.9	593.5	266.2	46.4	1.000101
31500.0	295.0	-42.1		444.7	592.2	268.5	45.7	1.000099
32000.0	288.4	-43.1		436.7	590.9	269.5	44.7	1.000097
32500.0	282.0	-44.1		428.9	589.6	270.3	43.7	1.000096
33000.0	275.7	-45.1		421.2	588.3	270.7	43.6	1.000094
33500.0	269.5	-46.2		413.6	586.9	271.1	43.6	1.000092
34000.0	263.4	-46.9		405.7	585.9	270.4	42.4	1.000090
34500.0	257.4	-47.3		397.1	585.4	269.8	41.3	1.000088
35000.0	251.6	-47.7		388.8	585.0	269.1	40.2	1.000087
35500.0	245.9	-48.3		380.9	584.2	269.0	40.4	1.000085
36000.0	240.2	-49.0		373.4	583.2	269.4	41.5	1.000083
36500.0	234.7	-49.7		366.0	582.3	271.6	42.5	1.000082
37000.0	229.3	-50.4		358.8	581.4	274.3	43.6	1.000080
37500.0	224.1	-51.2		351.7	580.4	277.6	45.1	1.000078
38000.0	218.9	-51.3		343.7	580.3	280.7	46.9	1.000077
38500.0	213.9	-51.3		335.9	580.2	280.3	48.2	1.000075
39000.0	208.9	-51.4		328.2	580.1	279.8	49.4	1.000073
39500.0	204.1	-51.5		320.8	580.0	275.8	50.1	1.000071
40000.0	199.4	-50.4		311.9	581.4	271.9	51.0	1.000069
40500.0	194.8	-50.7		305.1	581.0	271.0	52.0	1.000068
41000.0	190.3	-51.0		298.5	580.6	270.3	52.9	1.000066
41500.0	185.9	-51.3		292.0	580.2	271.6	52.5	1.000065
42000.0	181.6	-51.7		285.7	579.8	272.4	51.8	1.000064
42500.0	177.4	-52.0		279.4	579.4	271.6	50.2	1.000062
43000.0	173.3	-52.6		273.7	578.6	270.8	49.2	1.000061

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.00 FEET MSL  
16 APR. 60 0750 HRS MST  
ASCENSION NO. 199

UPPER AIR DATA  
1070020199  
WHITE SANDS  
TABLE 5 (CONT)

GEODETIC COORDINATES  
32.40043 LAT DEG  
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (DEGREES (T))	SPEED KNOTS	INDEX OF REFRACTION
43500.0	169.3	-53.2		268.1	577.7	269.9	49.3	1.000060
44000.0	165.3	-53.9		262.7	576.8	269.8	50.5	1.000059
44500.0	161.5	-54.6		257.3	576.0	270.5	52.6	1.000057
45000.0	157.7	-55.3		252.1	575.1	272.4	53.8	1.000056
45500.0	154.0	-55.8		246.8	574.4	274.9	54.7	1.000055
46000.0	150.4	-56.2		241.4	573.9	276.6	55.8	1.000054
46500.0	146.8	-56.6		236.1	573.3	278.0	57.1	1.000053
47000.0	143.3	-57.0		231.0	572.7	278.9	56.3	1.000051
47500.0	139.9	-57.4		226.0	572.2	280.0	54.7	1.000050
48000.0	136.6	-57.9		221.1	571.6	281.8	49.1	1.000049
48500.0	133.4	-58.3		216.3	571.0	283.4	44.6	1.000048
49000.0	130.2	-58.3		211.2	571.0	283.8	42.1	1.000047
49500.0	127.1	-58.4		206.2	570.9	283.8	40.3	1.000046
50000.0	124.1	-58.4		201.3	570.8	283.5	39.1	1.000045
50500.0	121.1	-58.5		196.6	570.8	283.6	38.4	1.000044
51000.0	118.2	-58.5		191.9	570.7	283.9	37.8	1.000043
51500.0	115.4	-58.6		187.4	570.6	283.8	38.1	1.000042
52000.0	112.7	-58.6		183.0	570.6	283.7	38.6	1.000041
52500.0	110.0	-58.7		178.7	570.5	283.8	37.5	1.000040
53000.0	107.4	-59.4		175.0	569.6	283.8	36.5	1.000039
53500.0	104.8	-60.3		171.5	568.3	283.6	36.9	1.000038
54000.0	102.3	-60.9		167.8	567.6	283.4	37.4	1.000037
54500.0	99.8	-60.9		163.8	567.6	283.2	38.3	1.000036
55000.0	97.4	-60.7		159.7	567.8	283.1	37.9	1.000036
55500.0	95.1	-60.5		155.8	568.1	283.6	32.5	1.000035
56000.0	92.8	-60.5		152.0	568.1	284.6	27.6	1.000034
56500.0	90.5	-60.8		148.5	567.7	284.9	25.6	1.000033
57000.0	88.3	-61.1		145.1	567.3	285.4	24.1	1.000032
57500.0	86.2	-61.4		141.8	566.9	286.8	25.8	1.000032
58000.0	84.1	-61.7		138.6	566.5	288.1	27.4	1.000031
58500.0	82.1	-62.1		135.4	566.0	289.7	28.3	1.000030
59000.0	80.1	-62.4		132.3	565.6	291.6	29.3	1.000029
59500.0	78.1	-62.7		129.3	565.2	296.2	30.8	1.000029
60000.0	76.2	-63.0		126.4	564.8	300.4	31.4	1.000028
60500.0	74.4	-63.3		123.5	564.3	306.6	27.1	1.000028
61000.0	72.6	-63.6		120.7	563.9	313.0	22.6	1.000027
61500.0	70.8	-63.9		118.0	563.5	311.1	15.8	1.000026
62000.0	69.1	-64.1		115.2	563.3	305.9	9.8	1.000026
62500.0	67.4	-64.1		112.4	563.3	290.3	6.4	1.000025
63000.0	65.8	-62.8		108.9	565.1	254.2	4.4	1.000024

STATION ALTITUDE 3989.00 FEET MSL  
 16 APR. 60 0750 HRS MST  
 ASCENSION NO. 199

UPPER AIR DATA  
 1070020199  
 WHITE CANUS

GEODETIC COORDINATES  
 32.40043 LAT DEG  
 106.37033 LON DEG

TABLE 5 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
63500.0	64.2	-61.3		105.6	567.0	242.8	5.8	1.000024
64000.0	62.7	-59.8		102.3	569.0	236.1	7.3	1.000023
64500.0	61.1	-59.9		99.9	568.9	233.9	8.4	1.000022
65000.0	59.7	-60.3		97.7	566.3	232.6	9.3	1.000022
65500.0	58.2	-60.8		95.6	567.7	235.6	9.7	1.000021
66000.0	56.8	-61.3		93.5	567.0	242.0	9.7	1.000021
66500.0	55.5	-61.1		91.1	567.3	249.0	9.6	1.000020
67000.0	54.2	-60.4		88.7	568.3	253.4	9.2	1.000020
67500.0	52.9	-59.7		86.3	569.2	267.3	8.8	1.000019
68000.0	51.6	-59.0		83.9	570.1	268.3	6.6	1.000019
68500.0	50.4	-58.3		81.7	571.0	270.2	4.5	1.000018
69000.0	49.2	-57.8		79.5	571.7	273.9	5.0	1.000018
69500.0	48.0	-57.4		77.5	572.3	276.5	6.1	1.000017
70000.0	46.9	-56.9		75.5	572.9	278.6	6.7	1.000017
70500.0	45.8	-56.5		73.6	573.5	280.8	6.8	1.000016
71000.0	44.7	-56.0		71.7	574.0	284.8	7.6	1.000016
71500.0	43.6	-55.6		69.9	574.6	290.5	10.3	1.000016
72000.0	42.6	-55.2		68.1	575.2	293.9	13.0	1.000015
72500.0	41.6	-54.8		66.4	575.7	317.8	10.3	1.000015
73000.0	40.6	-54.9		64.9	575.6	350.6	10.1	1.000014
73500.0	39.7	-54.9		63.4	575.5	28.4	11.4	1.000014
74000.0	38.8	-55.0		61.9	575.4	56.7	16.0	1.000014
74500.0	37.9	-55.1		60.5	575.3	67.4	20.3	1.000013
75000.0	37.0	-55.1		59.1	575.2	66.2	18.3	1.000013
75500.0	36.1	-55.2		57.7	575.1	64.6	16.2	1.000013
76000.0	35.3	-55.3		56.4	575.0	66.6	14.1	1.000013
76500.0	34.4	-55.3		55.1	575.0	71.9	12.0	1.000012
77000.0	33.6	-55.4		53.8	574.9	79.1	10.1	1.000012
77500.0	32.8	-55.2		52.5	575.1	66.0	9.3	1.000012
78000.0	32.1	-55.0		51.2	575.4	94.2	8.6	1.000011
78500.0	31.3	-54.8		50.0	575.6	99.1	8.2	1.000011
79000.0	30.6	-54.7		48.8	575.9	99.0	7.8	1.000011
79500.0	29.9	-54.5		47.6	576.1	99.0	7.4	1.000011
80000.0	29.2	-54.2		46.4	576.5	102.3	9.7	1.000010
80500.0	28.5	-53.9		45.3	576.9	104.6	12.6	1.000010
81000.0	27.9	-53.6		44.2	577.2	104.7	14.7	1.000010
81500.0	27.2	-53.3		43.1	577.6	99.6	14.6	1.000010
82000.0	26.6	-53.0		42.1	578.0	94.4	14.5	1.000009
82500.0	26.0	-52.8		41.1	578.4	90.3	13.8	1.000009
83000.0	25.4	-52.5		40.1	578.7	66.3	12.5	1.000009

STATION ALTITUDE 3989.00 FEET MSL  
16 APR 80 0750 HRS MST  
ASCENSION NO. 199

UPPER AIR DATA  
1070020199  
WHITE SANDS

GEODETIC COORDINATES  
32.40043 LAT DEG  
106.37033 LON DEG

TABLE 5 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION, DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
83500.0	24.8	-52.2		39.1	579.1	81.5	11.4	1.000009
84000.0	24.2	-51.9		38.1	579.5	80.6	10.0	1.000008
84500.0	23.7	-51.6		37.2	579.8	79.9	8.6	1.000008
85000.0	23.1	-51.3		36.3	580.2	79.0	7.3	1.000008
85500.0	22.6	-51.1		35.4	580.6	78.9	6.4	1.000008
86000.0	22.1	-50.8		34.6	580.9	78.9	5.5	1.000008
86500.0	21.6	-50.5		33.7	581.3	78.9	4.7	1.000008
87000.0	21.1	-50.2		32.9	581.7	79.1	4.9	1.000007
87500.0	20.6	-49.9		32.1	582.0	79.4	5.2	1.000007
88000.0	20.1	-49.7		31.3	582.4	79.7	5.3	1.000007
88500.0	19.6	-49.3		30.6	582.8	80.5	5.1	1.000007
89000.0	19.2	-49.0		29.8	583.3	81.4	4.9	1.000007
89500.0	18.8	-48.6		29.1	583.8	83.0	4.9	1.000006
90000.0	18.4	-48.3		28.4	584.2	87.3	5.5	1.000006
90500.0	17.9	-47.9		27.7	584.7	90.7	6.2	1.000006
91000.0	17.5	-47.5		27.1	585.2	93.4	7.0	1.000006
91500.0	17.1	-47.2		26.4	585.6	95.5	8.6	1.000006
92000.0	16.8	-46.8		25.8	586.1	97.0	10.2	1.000006
92500.0	16.4	-46.5		25.2	586.5	98.1	11.6	1.000006
93000.0	16.0	-46.1		24.6	587.0	98.5	11.8	1.000005
93500.0	15.7	-45.8		24.0	587.4	99.0	12.1	1.000005
94000.0	15.3	-45.4		23.4	587.9	99.4	12.3	1.000005
94500.0	15.0	-45.1		22.9	588.4	99.4	11.6	1.000005
95000.0	14.6	-44.7		22.3	588.8	99.4	11.0	1.000005
95500.0	14.3	-44.4		21.8	589.3	100.1	10.4	1.000005
96000.0	14.0	-44.0		21.3	589.7	116.7	11.3	1.000005
96500.0	13.7	-43.6		20.7	590.2	130.0	13.0	1.000005
97000.0	13.4	-43.3		20.2	590.6	139.7	15.2	1.000005
97500.0	13.1	-42.9		19.8	591.1	147.3	14.7	1.000004
98000.0	12.8	-42.6		19.3	591.6	155.2	14.5	1.000004
98500.0	12.5	-42.2		18.8	592.0	163.2	14.6	1.000004
99000.0	12.2	-41.8		18.4	592.6			1.000004
99500.0	11.9	-41.0		17.9	593.5			1.000004
100000.0	11.7	-40.3		17.5	594.4			1.000004
100500.0	11.4	-39.6		17.0	595.3			1.000004
101000.0	11.2	-38.9		16.6	596.3			1.000004



STATION ALTITUDE 3989.00 FEET MSL  
 16 APR. 80 0750 HRS MST  
 ASCENSION NO. 199

MANDATORY LEVELS  
 1070020199  
 WHITE SANDS

TABLE 6

GEODETIC COORDINATES  
 32.40043 LAT DEG  
 106.37033 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4988.	20.3	1.7	29.	331.9	4.6
800.0	6697.	17.7	-1.5	29.	355.6	6.9
750.0	8494.	13.9	-3.7	29.	349.7	9.6
700.0	10382.	8.1	-7.6	32.	324.8	9.5
650.0	12368.	2.4	-10.8	37.	297.0	10.2
600.0	14467.	-3.7	-15.5	39.	286.0	14.9
550.0	16697.	-8.4	-23.7	28.	289.4	25.0
500.0	19097.	-14.4	-31.4	22.	286.4	27.1
450.0	21682.	-21.3	-36.5	24.	284.5	28.9
400.0	24490.	-28.9	-42.6	25.	274.5	31.2
350.0	27582.	-34.4	-47.1	26.	260.5	46.8
300.0	31068.	-41.3			266.7	46.3
250.0	35063.	-47.8			268.9	39.9
200.0	39840.	-50.4			272.6	50.8
175.0	42687.	-52.3			271.2	49.3
150.0	45927.	-56.2			276.7	55.9
125.0	49703.	-58.4			283.6	39.5
100.0	54290.	-60.9			283.2	38.1
80.0	58836.	-62.4			291.7	29.3
70.0	61530.	-64.1			309.7	13.0
60.0	64659.	-60.2			232.9	9.0
50.0	68390.	-58.1			271.0	4.2
40.0	73044.	-54.9			11.9	10.7
30.0	79073.	-54.5			99.0	7.5
25.0	82923.	-52.3			84.0	11.9
20.0	87688.	-49.6			79.8	5.3
15.0	93930.	-45.1			99.4	11.8

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4126.59 FEET MSL  
16 APR. 80 1000 HRS MST  
ASCENSION NO. 115

SIGNIFICANT LEVEL DATA  
1070010115  
HOLLOMAN

GEODETIC COORDINATES  
32.88865 LAT DEG  
106.09965 LON DEG

TABLE 7

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE AIR	DEWPOINT DEGREES	REL. HUM. PERCENT
MILLIBARS	MSL FEET	DEGREES	CENTIGRADE	
878.0	4126.6	20.9	-5.8	16.0
867.7	4461.3	21.0	5.0	35.0
850.0	5044.2	18.6	3.3	36.0
806.6	6510.0	14.8	-5	35.0
766.0	7938.3	12.3	-2.7	35.0
700.0	10387.7	5.2	-7.6	39.0
633.2	13044.4	-2.0	-12.0	46.0
562.2	16102.4	-10.8	-18.0	55.0
553.6	16491.5	-11.7	-22.5	40.0
545.0	16885.8	-11.8	-25.1	32.0
500.0	19037.2	-16.3	-30.5	28.0
400.0	24411.0	-30.2	-42.7	28.0
346.8	27695.4	-38.6	-49.6	30.0
333.6	28568.4	-41.0		
300.0	30925.2	-44.8		
277.2	32655.5	-47.5		
250.0	34894.4	-49.3		
237.4	36005.4	-51.6		
221.6	37472.3	-53.2		
206.2	39002.4	-52.8		
200.0	39653.2	-51.7		
191.8	40548.6	-51.4		
173.6	42673.5	-53.3		
169.2	43218.5	-53.2		
150.0	45754.3	-57.0		
136.0	47789.2	-59.2		
129.0	48883.0	-58.5		
118.0	50726.0	-59.7		
108.0	52545.0	-61.4		
100.0	54111.3	-63.7		
89.6	56337.6	-63.1		
81.2	58321.8	-66.2		
73.2	60397.2	-66.2		
70.0	61298.5	-63.1		
65.8	62566.6	-59.4		
56.4	65723.4	-63.5		
54.2	66533.4	-59.4		
50.0	68208.3	-59.0		
35.2	75489.6	-58.7		
30.0	78836.9	-55.2		

STATION ALTITUDE 4126.59 FEET MSL  
 16 APR. 80 1000 HRS MST  
 ASCENSION NO. 115

SIGNIFICANT LEVEL DATA  
 1070010115  
 HOLLOMAN

GEODETIC COORDINATES  
 32.88865 LAT DEG  
 106.09965 LON DEG

TABLE 7 (CONT)

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE AIR	DEWPOINT DEGREES	REL. HUM. PERCENT
23.4	84120.1			
				-52.2

UPPER AIR DATA  
1070010115  
HOLLOMAN

STATION ALTITUDE 4126.59 FEET MSL  
16 APR 60  
ASCENSION NO. 115

GEODETIC COORDINATES  
32.88865 LAT DEG  
106.09965 LON DEG

TABLE 8

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
4126.6	878.0	20.9	16.0	1038.4	668.6	0.0	0.0	1.000249
4500.0	866.5	20.8	35.1	1022.9	669.2	6.8	1.5	1.000266
5000.0	851.3	18.0	35.9	1012.4	666.8	6.8	3.4	1.000260
5500.0	836.3	17.4	35.7	999.4	665.1	6.8	5.4	1.000255
6000.0	821.4	16.1	35.3	986.3	663.6	6.8	7.4	1.000249
6500.0	806.9	14.8	35.0	973.4	662.0	6.4	9.5	1.000244
7000.0	792.4	13.9	35.0	959.0	661.0	5.1	12.3	1.000239
7500.0	778.2	13.1	35.0	944.8	659.9	3.3	14.3	1.000235
8000.0	764.3	12.1	35.1	931.0	658.8	0.2	15.1	1.000231
8500.0	750.3	10.7	35.9	918.8	657.1	359.1	15.1	1.000226
9000.0	736.7	9.2	36.7	906.8	655.4	359.3	14.7	1.000222
9500.0	723.2	7.8	37.6	895.0	653.6	357.6	13.9	1.000218
10000.0	710.1	6.3	38.4	883.4	651.9	354.9	13.0	1.000215
10500.0	697.0	4.9	39.3	871.7	650.2	352.2	12.4	1.000211
11000.0	684.0	3.5	40.6	859.7	648.6	349.2	11.9	1.000207
11500.0	671.2	2.2	41.9	847.8	647.0	341.5	11.2	1.000204
12000.0	658.7	0.8	43.2	836.1	645.4	331.6	10.8	1.000200
12500.0	646.3	-0.5	44.6	824.6	643.7	317.9	10.6	1.000197
13000.0	634.3	-1.9	45.9	813.3	642.1	303.5	11.0	1.000194
13500.0	622.1	-3.3	47.3	802.0	640.4	295.8	11.5	1.000190
14000.0	610.1	-4.7	48.8	790.8	638.7	290.1	12.0	1.000187
14500.0	598.4	-6.2	50.3	779.9	636.9	292.3	12.1	1.000184
15000.0	586.8	-7.6	51.8	769.0	635.2	296.0	12.2	1.000181
15500.0	575.5	-9.1	53.2	758.4	633.4	300.4	13.4	1.000178
16000.0	564.4	-10.5	54.7	747.9	631.7	304.2	14.8	1.000175
16500.0	553.4	-11.7	59.8	736.9	630.1	305.7	16.3	1.000170
17000.0	542.5	-12.0	31.8	723.4	629.7	306.6	17.7	1.000165
17500.0	531.8	-13.1	30.9	712.0	628.4	310.0	18.1	1.000162
18000.0	521.2	-14.1	29.9	700.7	627.1	313.7	18.4	1.000160
18500.0	510.9	-15.2	29.0	689.6	625.8	317.6	18.4	1.000157
19000.0	500.7	-16.2	28.1	678.7	624.6	320.9	18.7	1.000154
19500.0	490.5	-17.5	28.0	668.1	623.0	319.6	19.6	1.000151
20000.0	480.4	-18.8	28.0	657.8	621.4	313.1	20.3	1.000149
20500.0	470.5	-20.1	28.0	647.5	619.8	320.6	20.5	1.000146
21000.0	460.9	-21.4	28.0	637.5	618.2	324.7	20.3	1.000144
21500.0	451.4	-22.7	28.0	627.7	616.6	333.6	19.8	1.000141
22000.0	442.1	-24.0	28.0	618.0	615.0	339.2	19.0	1.000139
22500.0	433.0	-25.3	28.0	608.4	613.4	340.4	20.1	1.000137
23000.0	424.1	-26.6	28.0	599.1	611.8	341.7	20.4	1.000135
23500.0	415.4	-27.8	28.0	589.9	610.2	343.2	20.7	1.000132

STATION ALTITUDE 4126.59 FEET MSL  
16 APR 60 1000 HRS MST  
ASCENSION NO. 115

UPPER AIR DATA  
107001011  
HOLLOMAN

GEODETIC COORDINATE  
32.88865 LAT DEG  
106.09965 LONG DEG

TABLE 8 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION, DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
2400.0	406.9	-29.1	28.0	580.8	608.6	346.4	20.9	1.000130
2450.0	398.5	-30.4	28.1	571.8	607.0	351.9	21.3	1.000128
2500.0	389.9	-31.7	28.4	562.5	605.4	355.6	21.8	1.000126
2550.0	381.5	-33.0	28.7	553.3	603.8	359.4	22.4	1.000124
2600.0	373.3	-34.3	29.0	544.3	602.2	355.9	22.8	1.000122
2650.0	365.3	-35.5	29.3	535.5	600.5	352.9	23.0	1.000120
2700.0	357.4	-36.8	29.6	526.8	598.9	349.3	23.0	1.000118
2750.0	349.8	-38.1	29.9	518.3	597.3	343.7	22.5	1.000116
2800.0	342.1	-39.4	29.5**	510.0	595.8	337.5	22.2	1.000114
2850.0	334.6	-40.8	2.4**	501.7	593.8	330.1	22.5	1.000112
2900.0	327.2	-41.7		492.4	592.7	323.4	23.1	1.000110
2950.0	319.9	-42.5		483.2	591.7	318.9	24.2	1.000108
3000.0	312.8	-43.3		474.1	590.6	315.3	25.0	1.000106
3050.0	305.8	-44.1		465.1	589.6	312.9	24.5	1.000104
3100.0	299.0	-44.9		456.3	588.6	309.9	24.1	1.000102
3150.0	292.2	-45.7		447.6	587.5	303.6	23.9	1.000100
3200.0	285.6	-46.5		439.0	586.5	297.2	24.0	1.000098
3250.0	279.2	-47.3		430.5	585.5	293.6	25.5	1.000096
3300.0	272.8	-47.8		421.7	584.9	291.2	27.2	1.000094
3350.0	266.6	-48.2		412.8	584.3	286.5	28.4	1.000092
3400.0	260.5	-48.6		404.1	583.8	280.3	29.5	1.000090
3450.0	254.6	-49.0		395.6	583.3	274.0	31.5	1.000088
3500.0	248.8	-49.5		387.5	582.6	267.6	35.5	1.000086
3550.0	243.1	-50.6		380.4	581.2	262.6	39.9	1.000085
3600.0	237.5	-51.6		373.4	579.9	260.3	41.9	1.000083
3650.0	232.0	-52.1		365.6	579.2	269.7	44.1	1.000081
3700.0	226.6	-52.7		358.0	578.4	273.0	45.0	1.000080
3750.0	221.3	-53.2		350.5	577.8	270.3	45.5	1.000078
3800.0	216.2	-53.1		342.2	578.0	277.8	46.5	1.000076
3850.0	211.1	-52.9		334.0	578.1	276.0	48.5	1.000074
3900.0	206.2	-52.8		326.0	578.3	274.3	50.6	1.000073
3950.0	201.4	-52.0		317.3	579.4	273.7	51.0	1.000071
4000.0	196.8	-51.6		309.4	579.9	273.2	51.2	1.000069
4050.0	192.2	-51.4		302.0	580.1	273.1	50.7	1.000067
4100.0	187.8	-51.8		295.5	579.6	273.7	49.3	1.000066
4150.0	183.4	-52.3		289.3	579.0	274.4	47.9	1.000064
4200.0	179.2	-52.7		283.1	578.4	275.2	47.9	1.000063
4250.0	175.0	-53.1		277.1	577.8	276.0	48.0	1.000062
4300.0	171.0	-53.2		270.8	577.7	276.9	48.4	1.000060
4350.0	167.0	-53.6		264.9	577.2	277.7	49.3	1.000059

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4126.59 FEET MSL  
16 APR. 60 1000 HRS MST  
ASCENSION NO. 115

UPPER AIR DATA  
1070010115  
HOLLOMAN

GEODETIC COORDINATES  
32.88865 LAT DEG  
106.09965 LONG DEG

TABLE 8 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
4400.0	163.0	-54.4		259.6	576.2	278.4	50.1	1.000058
4450.0	159.2	-55.1		254.4	575.2	278.0	49.6	1.000057
4500.0	155.5	-55.9		249.3	574.3	277.5	49.0	1.000056
4550.0	151.8	-56.6		244.3	573.3	277.1	48.5	1.000054
4600.0	148.2	-57.3		239.2	572.4	276.6	47.9	1.000053
4650.0	144.7	-57.8		234.1	571.7	276.4	47.4	1.000052
4700.0	141.3	-58.3		229.1	571.0	276.7	46.6	1.000051
4750.0	137.9	-58.9		224.2	570.3	277.3	45.9	1.000050
4800.0	134.6	-59.1		219.1	570.0	277.9	45.1	1.000049
4850.0	131.4	-58.7		213.5	570.4	279.0	43.0	1.000048
4900.0	128.3	-58.6		208.3	570.7	281.0	40.8	1.000046
4950.0	125.2	-58.9		203.6	570.2	283.7	38.7	1.000045
5000.0	122.2	-59.2		199.0	569.8	284.8	36.7	1.000044
5050.0	119.3	-59.6		194.6	569.4	280.1	34.7	1.000043
5100.0	116.4	-60.0		190.3	568.8	280.8	33.1	1.000042
5150.0	113.6	-60.4		186.1	568.2	285.9	32.7	1.000041
5200.0	110.9	-60.9		182.0	567.6	284.8	32.2	1.000041
5250.0	108.2	-61.4		178.0	567.0	284.3	32.1	1.000040
5300.0	105.6	-62.1		174.3	566.0	284.6	32.6	1.000039
5350.0	103.0	-62.8		170.7	565.0	285.2	33.1	1.000038
5400.0	100.5	-63.5		167.1	564.0	286.4	33.1	1.000037
5450.0	98.1	-63.6		163.1	564.0	289.3	32.1	1.000036
5500.0	95.7	-63.5		159.0	564.1	292.3	31.1	1.000035
5550.0	93.4	-63.3		155.0	564.3	294.0	29.9	1.000035
5600.0	91.1	-63.2		151.2	564.5	292.9	28.0	1.000034
5650.0	88.9	-63.4		147.6	564.3	291.7	26.2	1.000033
5700.0	86.7	-64.1		144.5	563.2	289.2	24.5	1.000032
5750.0	84.6	-64.9		141.5	562.2	285.2	23.3	1.000032
5800.0	82.5	-65.7		138.5	561.1	280.8	22.1	1.000031
5850.0	80.5	-66.2		135.5	560.4	279.0	21.1	1.000030
5900.0	78.5	-66.2		132.1	560.4	278.9	20.3	1.000029
5950.0	76.6	-66.2		128.9	560.4	278.7	19.4	1.000029
6000.0	74.7	-66.2		125.7	560.4	278.4	19.1	1.000028
6050.0	72.8	-65.8		122.4	560.9	278.0	18.7	1.000027
6100.0	71.0	-64.1		118.4	563.2	277.8	18.3	1.000026
6150.0	69.3	-62.5		114.6	565.4	278.0	17.4	1.000026
6200.0	67.6	-61.1		111.1	567.4	278.2	16.5	1.000025
6250.0	66.0	-59.6		107.7	569.3	277.6	15.7	1.000024
6300.0	64.4	-60.0		105.3	568.8	275.0	15.0	1.000023
6350.0	62.9	-60.6		103.0	568.0	272.1	14.4	1.000023

STATION ALTITUDE 4126.59 FEET MSL  
16 APR. 60  
ASCENSION, I.O. 115  
1000 HRS MST

UPPER AIR DATA  
10700101  
HOLLOMAN

GEODETLIC COORDINATES  
32.88865 LAT DEG  
106.89965 LON DEG

TABLE 8 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CM <sup>3</sup>	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE				DIRECTION DEGREES (T)	SPEED KNOTS	
64000.0	61.4	-61.3			100.9	567.1	269.4	13.8	1.000022
64500.0	59.9	-61.9			98.7	566.2	267.5	13.0	1.000022
65000.0	58.4	-62.6			96.7	565.3	265.5	12.3	1.000022
65500.0	57.0	-63.2			94.6	564.5	265.1	11.3	1.000021
66000.0	55.6	-62.1			91.9	566.0	273.3	9.8	1.000020
66500.0	54.3	-59.6			88.6	569.3	284.2	8.5	1.000020
67000.0	53.0	-59.3			86.3	569.7	296.6	7.6	1.000019
67500.0	51.7	-59.2			84.2	569.9	302.7	6.5	1.000019
68000.0	50.5	-59.0			82.2	570.0	311.1	5.6	1.000018
68500.0	49.3	-59.0			80.2	570.1	320.9	4.8	1.000018
69000.0	48.1	-59.0			76.3	570.1	313.3	4.5	1.000017
69500.0	47.0	-58.9			76.4	570.2	304.9	4.3	1.000017
70000.0	45.9	-58.9			74.6	570.2	295.9	4.2	1.000017
70500.0	44.8	-58.9			72.8	570.2	320.2	4.1	1.000016
71000.0	43.7	-58.9			71.1	570.3	342.3	4.7	1.000016
71500.0	42.7	-58.9			69.4	570.3	357.7	5.8	1.000015
72000.0	41.6	-58.8			67.7	570.3	41.0	6.4	1.000015
72500.0	40.7	-58.8			66.1	570.3	69.0	9.8	1.000015
73000.0	39.7	-58.8			64.5	570.4	80.9	14.2	1.000014
73500.0	38.7	-58.8			63.0	570.4	87.7	14.8	1.000014
74000.0	37.8	-58.8			61.5	570.4	94.5	14.4	1.000014
74500.0	36.9	-58.7			60.0	570.4	101.5	14.3	1.000013
75000.0	36.0	-58.7			58.6	570.5	104.6	12.0	1.000013
75500.0	35.2	-58.7			57.1	570.5	106.5	8.5	1.000013
76000.0	34.4	-58.2			55.7	571.2	110.9	5.1	1.000012
76500.0	33.5	-57.6			54.2	571.9	115.9	3.4	1.000012
77000.0	32.8	-57.1			52.8	572.6	108.6	3.6	1.000012
77500.0	32.0	-56.6			51.4	573.3	104.1	3.7	1.000011
78000.0	31.2	-56.1			50.1	574.0	102.4	4.2	1.000011
78500.0	30.5	-55.6			48.8	574.7	105.6	5.4	1.000011
79000.0	29.8	-55.1			47.6	575.3	107.6	6.5	1.000011
79500.0	29.1	-54.8			46.4	575.6	108.6	7.7	1.000010
80000.0	28.4	-54.5			45.3	576.0	104.9	8.3	1.000010
80500.0	27.7	-54.3			44.2	576.4	101.7	9.0	1.000010
81000.0	27.1	-54.0			43.1	576.8	99.0	9.7	1.000010
81500.0	26.5	-53.7			42.0	577.1			1.000009
82000.0	25.9	-53.4			41.0	577.5			1.000009
82500.0	25.3	-53.1			40.0	577.9			1.000009
83000.0	24.7	-52.8			39.0	578.3			1.000009
83500.0	24.1	-52.6			38.0	578.6			1.000009

GEODETIC COORDINATES  
 32.66365 LAT DEG  
 106.09905 LON DEG

UPPER AIR DATA  
 1070010115  
 HOLLOMAN

STATION ALTITUDE 4126.59 FEET MSL  
 16 APR 60 1000 HRS MST  
 ASSET, S101, 115

TABLE 8 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION, DEGREES (T)	SPEED KNOTS	
84000.0	23.5	-52.3			37.1 579.0			1.000008



STATION ALTITUDE 4126.00 FEET MS  
16 APR. 60  
ASCENDING 115

MANDATORY LEVELS  
107001  
HOLLOMAN

GEODETIC COORDINATES  
32.00465 LAT N  
106.09965 LONG W

TABLE 9

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	5041.	18.6	3.3	30.	0.0	3.6
800.0	6733.	14.4	-0.8	35.	5.7	10.8
750.0	8510.	10.6	-3.8	30.	359.1	15.1
700.0	10378.	5.2	-7.6	39.	352.9	12.5
650.0	12345.	-0.1	-10.8	44.	322.3	10.6
600.0	14425.	-6.0	-14.7	50.	291.8	12.1
550.0	16635.	-11.7	-23.5	57.	300.0	10.7
500.0	19011.	-16.3	-30.5	28.	320.9	10.7
450.0	21579.	-22.9	-36.3	28.	335.5	19.7
400.0	24371.	-30.2	-42.7	28.	350.8	21.2
350.0	27439.	-38.1	-49.1	30.	343.9	22.5
300.0	30865.	-44.8			310.9	24.2
250.0	34820.	-49.3			269.1	34.5
200.0	39560.	-51.7			273.5	51.1
175.0	42307.	-53.1			270.0	40.0
150.0	45033.	-57.0			270.9	46.2
125.0	49306.	-58.9			283.8	38.6
100.0	53947.	-63.7			280.9	32.9
80.0	58429.	-66.2			279.0	21.0
70.0	61021.	-63.1			277.3	17.8
60.0	64235.	-61.9			267.8	13.1
50.0	67955.	-59.0			314.8	5.3
40.0	72549.	-58.8			77.2	12.4
30.0	78504.	-55.2			106.9	0.1
25.0	82342.	-53.0				

STATION ALTITUDE 4051.00 FEET MSL  
16 APR. 80 0800 HRS MST  
ASCENSION NO. 108

SIGNIFICANT LEVEL DATA  
1070030108  
JALLEN

GEODETIC COORDINATES  
33.16712 LAT DEG  
106.49511 LONG DEG

TABLE 10

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE		REL. HUM. PERCENT
880.8	4051.0	15.5	-5.5	23.0
860.6	4693.9	13.5	-7.2	23.0
850.0	5037.4	15.5	-5.5	23.0
781.6	7359.9	12.8	-8.4	22.0
742.4	8769.3	9.4	-10.1	24.0
700.0	10357.7	4.9	-12.0	28.0
641.6	12666.5	-1.1	-16.0	31.0
589.4	14863.6	-7.8	-19.9	37.0
555.8	16351.3	-12.4	-23.2	40.0
531.2	17485.0	-14.0	-33.7	17.0
500.0	18985.6	-17.6	-36.1	18.0
468.4	20583.5	-20.6	-39.2	17.0
400.0	24343.7	-31.3	-47.5	18.0
388.0	25050.8	-33.2	-49.3	18.0
337.8	28203.2	-41.0		
328.2	28848.5	-41.0		
300.0	30843.8	-44.6		
268.8	33246.2	-48.0		
265.9	33481.8	-47.8		
250.0	34813.1	-50.8		
234.6	36172.0	-52.4		
220.9	37449.8	-53.7		
214.4	38083.9	-52.5		
205.9	38942.1	-54.1		
200.0	39559.5	-52.1		
195.0	40099.8	-51.9		
172.4	42706.7	-55.9		
159.6	44320.7	-57.0		
150.0	45609.7	-58.9		
129.1	48686.9	-62.7		
120.8	50042.5	-61.2		
107.0	52521.3	-62.1		
100.0	53901.2	-62.1		
96.2	54694.7	-60.3		
81.8	57994.9	-64.9		
73.0	60275.0	-67.0		
70.0	61113.0	-66.3		
67.4	61876.2	-63.0		
64.8	62674.7	-63.6		
62.0	63577.4	-60.1		

STATION ALTITUDE 4051.00 FEET MSL  
 16 APR. 80 0800 HRS MST  
 ASCENSION NO. 108

SIGNIFICANT LEVEL DATA  
 1070030108  
 JALLEN  
 TABLE 10 (CONT)

GEODETIC COORDINATES  
 53.16712 LAT DEG  
 106.49511 LON DEG

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
56.6 65444.0	-62.7	
50.0 67983.1	-60.3	
42.8 71208.0	-57.4	
33.4 76365.4	-59.3	
30.0 78601.1	-57.0	
24.0 83292.7	-55.3	
20.0 87184.1	-50.6	
12.8 96949.5	-44.5	

STATION ALTITUDE 4051.00 FEET MSL  
16 APR. 80 0800 HRS MST  
ASCENSION NO. 108

UPPER AIR DATA  
1070030106  
JALLEN  
TABLE 11

GEODETIC COORDINATES  
33.16712 LAT DEG  
106.49511 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION, DEGREES (T), SPEED KNOTS	INDEX OF REFRACTION
4051.0	880.8	15.5	23.0	1061.2	602.5	20.0	1.000255
4500.0	866.6	14.1	23.0	1049.3	600.8	4.8	1.000251
5000.0	851.1	15.3	23.0	1026.2	602.2	358.3	1.000247
5500.0	835.9	15.0	22.8	1009.0	601.8	355.1	1.000243
6000.0	821.0	14.4	22.6	993.0	601.2	352.4	1.000238
6500.0	806.3	13.8	22.4	977.2	600.5	350.2	1.000234
7000.0	791.8	13.2	22.2	961.7	600.8	350.4	1.000230
7500.0	777.6	12.5	22.2	947.0	600.9	1.3	1.000226
8000.0	763.5	11.3	22.9	933.8	607.5	4.7	1.000222
8500.0	749.7	10.0	23.6	920.9	606.1	7.5	1.000219
9000.0	730.1	8.7	24.6	908.4	604.6	7.4	1.000216
9500.0	722.6	7.3	25.8	896.2	602.9	5.6	1.000212
10000.0	709.3	5.9	27.1	884.3	601.2	359.5	1.000209
10500.0	696.3	4.5	28.2	872.4	600.0	349.7	1.000206
11000.0	683.2	3.2	28.8	860.1	600.1	335.3	1.000203
11500.0	670.5	1.9	29.5	848.1	600.5	322.2	1.000199
12000.0	657.9	.6	30.1	836.3	605.0	308.6	1.000196
12500.0	645.6	-.7	30.8	824.6	603.4	300.4	1.000193
13000.0	633.4	-2.1	31.9	813.3	601.7	292.6	1.000190
13500.0	621.3	-3.6	33.3	802.3	600.9	269.1	1.000187
14000.0	609.4	-5.2	34.6	791.5	600.0	286.3	1.000184
14500.0	597.7	-6.7	36.0	780.8	606.2	205.1	1.000181
15000.0	586.2	-8.2	37.3	770.3	604.4	265.1	1.000178
15500.0	574.8	-9.8	38.3	759.7	602.5	265.8	1.000175
16000.0	563.6	-11.3	39.3	749.3	600.6	286.8	1.000172
16500.0	552.5	-12.6	37.0	738.3	600.0	288.2	1.000169
17000.0	541.6	-13.3	26.8	725.8	600.1	291.0	1.000165
17500.0	530.9	-14.0	17.0	713.6	607.2	292.3	1.000161
18000.0	520.3	-15.2	17.3	702.6	605.7	292.3	1.000158
18500.0	509.9	-16.4	17.7	691.8	604.3	293.3	1.000156
19000.0	499.7	-17.6	18.0	681.1	602.8	295.0	1.000153
19500.0	489.6	-18.6	17.7	669.8	601.7	299.0	1.000151
20000.0	479.7	-19.5	17.4	658.7	600.5	301.3	1.000148
20500.0	470.0	-20.4	17.1	647.8	600.0	301.0	1.000146
21000.0	460.3	-21.8	17.1	637.8	600.0	299.5	1.000143
21500.0	450.7	-23.2	17.2	628.1	600.0	297.2	1.000141
22000.0	441.4	-24.6	17.4	618.6	600.0	295.2	1.000139
22500.0	432.2	-26.1	17.5	609.2	600.0	293.3	1.000136
23000.0	423.2	-27.5	17.6	600.1	600.0	291.7	1.000134
23500.0	414.4	-28.9	17.8	591.0	600.0	290.3	1.000132

STATION ALTITUDE 4051.00 FEET MSL  
16 APR. 80  
ASCENSION NO. 108

UPPER AIR DATA  
1070000100  
JALLEN

GEODETIC COORDINATES  
33.16712 LAT DEG  
106.49511 LONG DEG

TABLE 11 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION, DEGREES (T, I)	SPEED KNOTS	INDEX OF REFRACTION.
24000.0	405.8	-30.3	17.9	582.1	607.1	289.0	27.2	1.000130
24500.0	397.3	-31.7	18.0	573.3	605.3	287.8	26.7	1.000128
25000.0	388.9	-33.1	18.0	564.2	603.7	287.4	26.5	1.000126
25500.0	380.4	-34.3	15.4**	554.8	602.1	287.6	26.6	1.000124
26000.0	372.1	-35.5	12.6**	545.6	600.5	290.1	28.1	1.000122
26500.0	364.1	-36.8	9.7**	536.6	599.0	293.1	30.1	1.000120
27000.0	356.1	-38.0	6.9**	527.7	597.4	297.2	29.6	1.000118
27500.0	348.4	-39.3	4.0**	518.9	595.8	301.8	29.0	1.000116
28000.0	340.8	-40.5	1.2**	510.3	594.2	303.1	26.9	1.000114
28500.0	333.4	-41.0		500.2	593.6	304.6	24.8	1.000111
29000.0	326.0	-41.3		489.7	593.2	301.8	25.0	1.000109
29500.0	318.7	-42.2		480.7	592.1	298.8	25.4	1.000107
30000.0	311.6	-43.1		471.8	590.9	293.6	26.4	1.000105
30500.0	304.7	-44.0		463.1	589.8	289.0	27.4	1.000103
31000.0	297.9	-44.8		454.5	588.7	285.2	27.6	1.000101
31500.0	291.1	-45.5		445.6	587.8	283.1	27.9	1.000099
32000.0	284.6	-46.2		436.9	586.8	283.8	28.2	1.000097
32500.0	278.1	-46.9		428.3	585.9	283.6	28.6	1.000095
33000.0	271.8	-47.7		420.0	585.0	282.4	29.2	1.000094
33500.0	265.7	-47.8		410.8	584.8	279.3	30.7	1.000091
34000.0	259.6	-49.0		403.4	583.3	275.1	33.3	1.000090
34500.0	253.7	-50.1		396.1	581.8	272.4	35.8	1.000088
35000.0	247.8	-51.0		388.7	580.6	270.8	38.2	1.000087
35500.0	242.1	-51.6		380.7	579.9	271.0	39.6	1.000085
36000.0	236.5	-52.2		372.9	579.1	274.1	39.3	1.000083
36500.0	231.0	-52.7		365.1	578.4	277.1	39.0	1.000081
37000.0	225.6	-53.2		357.4	577.7	279.4	38.8	1.000080
37500.0	220.4	-53.6		349.7	577.2	281.8	38.7	1.000078
38000.0	215.2	-54.7		340.1	578.5	280.1	39.1	1.000076
38500.0	210.2	-55.3		333.1	577.7	278.7	39.5	1.000074
39000.0	205.3	-55.9		326.3	576.8	277.1	39.8	1.000073
39500.0	200.6	-56.3		316.4	579.0	275.5	40.1	1.000070
40000.0	195.9	-51.9		308.5	579.4	274.1	40.9	1.000069
40500.0	191.3	-52.5		302.1	578.7	272.8	41.9	1.000067
41000.0	186.9	-53.3		296.1	577.7	272.0	42.9	1.000066
41500.0	182.5	-54.0		290.2	576.7	272.0	43.6	1.000065
42000.0	178.3	-54.8		284.4	575.0	272.1	44.3	1.000063
42500.0	174.1	-55.6		278.8	574.6	273.4	45.0	1.000062
43000.0	170.0	-56.1		272.8	574.0	274.6	45.8	1.000061
43500.0	166.0	-56.4		266.8	573.5	275.4	48.2	1.000059

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL  
 16 APR. 60  
 ASCENSION NO. 108

UPPER AIR DATA  
 1070030108  
 JALLEN

GEODETIC COORDINATES  
 33.16712 LAT DEG  
 106.49511 LON DEG

TABLE 11 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE				DIRECTION DEGREES (TN)	SPEED KNOTS	
4400.0	162.1	-56.8			260.9	573.1	275.9	50.9	1.000058
4450.0	158.2	-57.3			255.3	572.4	276.3	52.2	1.000057
4500.0	154.5	-58.0			250.1	571.4	276.6	52.3	1.000056
4550.0	150.8	-58.7			245.0	570.5	276.9	52.1	1.000055
4600.0	147.2	-59.4			239.8	569.6	277.3	50.7	1.000053
4650.0	143.6	-60.0			234.7	568.8	277.8	49.3	1.000052
4700.0	140.2	-60.6			229.7	567.9	277.5	48.9	1.000051
4750.0	136.8	-61.2			224.9	567.1	277.0	48.7	1.000050
4800.0	133.5	-61.9			220.1	566.3	277.3	49.3	1.000049
4850.0	130.3	-62.5			215.4	565.5	278.2	50.5	1.000048
4900.0	127.1	-62.4			210.1	565.6	279.4	51.4	1.000047
4950.0	124.1	-61.8			204.5	566.4	281.7	51.5	1.000046
5000.0	121.1	-61.2			199.0	567.1	283.9	51.7	1.000044
5050.0	118.1	-61.4			194.3	568.9	285.3	48.6	1.000043
5100.0	115.3	-61.5			189.8	569.7	286.8	45.3	1.000042
5150.0	112.5	-61.7			185.3	566.5	288.7	43.3	1.000041
5200.0	109.8	-61.9			181.0	566.2	290.9	41.9	1.000040
5250.0	107.1	-62.1			176.8	566.0	292.3	41.1	1.000039
5300.0	104.5	-62.1			172.5	566.0	292.3	41.1	1.000038
5350.0	102.0	-62.1			168.3	566.0	292.2	41.1	1.000037
5400.0	99.5	-61.9			164.1	566.3	290.5	37.7	1.000037
5450.0	97.1	-60.7			159.3	567.8	288.3	34.4	1.000035
5500.0	94.8	-60.7			155.4	567.8	286.9	30.6	1.000035
5550.0	92.5	-61.4			152.1	566.9	285.7	26.5	1.000034
5600.0	90.2	-62.1			148.9	565.9	284.5	22.9	1.000033
5650.0	88.0	-62.8			145.8	565.0	284.3	21.7	1.000032
5700.0	85.9	-63.5			142.7	564.1	284.1	20.5	1.000032
5750.0	83.8	-64.2			139.7	563.1	291.3	20.6	1.000031
5800.0	81.8	-64.9			136.8	562.2	300.6	21.8	1.000030
5850.0	79.8	-65.4			133.7	561.6	308.5	23.1	1.000030
5900.0	77.8	-65.8			130.7	560.9	315.3	23.5	1.000029
5950.0	75.9	-66.3			127.8	560.3	321.7	24.3	1.000028
6000.0	74.0	-66.7			124.9	559.7	318.8	21.8	1.000028
6050.0	72.2	-66.8			121.9	559.6	312.4	18.7	1.000027
6100.0	70.4	-66.4			118.6	560.2	303.4	16.2	1.000026
6150.0	68.7	-64.6			114.7	562.2	291.1	14.7	1.000026
6200.0	67.0	-63.1			111.1	564.6	276.8	14.0	1.000025
6250.0	65.4	-63.5			108.6	564.1	268.7	12.4	1.000024
6300.0	63.8	-62.3			105.4	565.6	255.6	10.4	1.000023
6350.0	62.2	-60.4			101.9	568.2	240.6	9.1	1.000023

STATION ALTITUDE 4052.00 FEET MSL  
16 APR. 80 0800 HRS MS  
ASCENSION NO. 108

UPPER AIR DATA  
1070030100  
JALLEN

GEODETIC COORDINATES  
33.16712 LAT DEG  
106.49511 LON DEG

TABLE 11 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
6400.0	60.7	-60.7		99.6	567.9	229.2	10.1	1.000022
6450.0	59.3	-61.4		97.5	566.9	220.2	11.5	1.000022
6500.0	57.8	-62.1		95.5	566.0	219.2	11.8	1.000021
6550.0	56.4	-62.6		93.4	565.2	228.3	10.5	1.000021
6600.0	55.1	-62.2		91.0	565.9	239.6	9.5	1.000020
6650.0	53.8	-61.7		88.6	566.5	255.0	7.6	1.000020
6700.0	52.5	-61.2		86.2	567.1	281.1	6.1	1.000019
6750.0	51.2	-60.8		84.0	567.8	312.3	6.3	1.000019
6800.0	50.0	-60.3		81.8	568.4	308.3	6.1	1.000018
6850.0	48.8	-59.8		79.6	569.0	304.0	5.9	1.000018
6900.0	47.6	-59.4		77.6	569.6	300.6	5.8	1.000017
6950.0	46.5	-58.9		75.6	570.2	301.0	5.7	1.000017
7000.0	45.4	-58.5		73.6	570.8	301.2	5.7	1.000016
7050.0	44.3	-58.0		71.7	571.4	311.1	5.6	1.000016
7100.0	43.2	-57.6		69.9	572.0	330.6	6.0	1.000016
7150.0	42.2	-57.5		68.2	572.1	346.4	7.0	1.000015
7200.0	41.2	-57.7		66.6	571.8	5.2	6.8	1.000015
7250.0	40.2	-57.9		65.1	571.6	30.3	6.8	1.000014
7300.0	39.3	-58.1		63.6	571.4	51.5	8.0	1.000014
7350.0	38.3	-58.2		62.1	571.1	69.1	9.3	1.000014
7400.0	37.4	-58.4		60.7	570.9	82.2	11.2	1.000014
7450.0	36.5	-58.6		59.3	570.6	91.1	13.5	1.000013
7500.0	35.7	-58.8		58.0	570.4	90.6	13.1	1.000013
7550.0	34.8	-59.0		56.6	570.1	90.1	12.7	1.000013
7600.0	34.0	-59.2		55.3	569.9	89.6	12.2	1.000012
7650.0	33.2	-59.2		54.0	569.9	90.1	11.1	1.000012
7700.0	32.4	-58.6		52.6	570.0	90.7	10.0	1.000012
7750.0	31.6	-58.1		51.2	571.3	91.4	8.9	1.000011
7800.0	30.9	-57.6		49.9	571.9	91.4	8.8	1.000011
7850.0	30.1	-57.1		48.6	572.6	91.4	8.8	1.000011
7900.0	29.4	-56.9		47.4	573.0	91.3	8.7	1.000011
7950.0	28.7	-56.7		46.3	573.2	90.7	8.4	1.000010
8000.0	28.1	-56.5		45.1	573.4	89.9	8.1	1.000010
8050.0	27.4	-56.3		44.0	573.7	89.1	7.7	1.000010
8100.0	26.8	-56.1		43.0	573.9	89.8	7.9	1.000010
8150.0	26.1	-55.9		41.9	574.2	90.5	8.2	1.000009
8200.0	25.5	-55.8		40.9	574.4	91.1	8.5	1.000009
8250.0	24.9	-55.6		39.9	574.6	89.5	10.0	1.000009
8300.0	24.3	-55.4		38.9	574.9	88.2	11.7	1.000009
8350.0	23.8	-55.0		36.0	575.3	87.1	13.3	1.000008

STATION ALTITUDE 4051.00 FEET MSL  
16 APR. 60 0800 HRS MST  
ASCENSION NO. 108

UPPER AIR DATA  
1070030106  
JALLEN

GEODETIC COORDINATES  
33.16712 LAT DEG  
106.49511 LON DEG

TABLE 11 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA DIRECTION, DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE			KNOTS	FEET			
84000.0	23.2	-54.4			37.0	576.1	84.5		13.9	1.000008
84500.0	22.7	-53.8			36.0	576.9	81.7		14.3	1.000008
85000.0	22.2	-53.2			35.1	577.7	79.1		14.7	1.000008
85500.0	21.6	-52.6			34.2	578.5	78.6		14.3	1.000008
86000.0	21.1	-52.0			33.3	579.3	79.0		13.5	1.000007
86500.0	20.7	-51.4			32.4	580.1	79.4		12.7	1.000007
87000.0	20.2	-50.8			31.6	580.9	81.5		12.3	1.000007
87500.0	19.7	-50.4			30.8	581.4	84.7		12.0	1.000007
88000.0	19.3	-50.1			30.1	581.8	83.0		11.8	1.000007
88500.0	18.8	-49.8			29.4	582.3	90.6		11.6	1.000007
89000.0	18.4	-49.5			28.7	582.7	92.9		11.5	1.000006
89500.0	18.0	-49.2			28.0	583.1	95.0		11.3	1.000006
90000.0	17.6	-48.8			27.3	583.5	97.2		11.2	1.000006
90500.0	17.2	-48.5			26.7	583.9	99.6		11.2	1.000006
91000.0	16.8	-48.2			26.0	584.3	102.1		11.2	1.000006
91500.0	16.4	-47.9			25.4	584.7	104.5		11.2	1.000006
92000.0	16.0	-47.6			24.8	585.1	106.1		11.0	1.000006
92500.0	15.7	-47.3			24.2	585.5	107.6		10.8	1.000005
93000.0	15.3	-47.0			23.6	585.9	109.5		10.6	1.000005
93500.0	15.0	-46.7			23.0	586.3	111.6		10.3	1.000005
94000.0	14.6	-46.3			22.5	586.7	113.7		10.1	1.000005
94500.0	14.3	-46.0			22.0	587.1	116.0		9.9	1.000005
95000.0	14.0	-45.7			21.4	587.5				1.000005
95500.0	13.7	-45.4			20.9	587.9				1.000005
96000.0	13.4	-45.1			20.4	588.3				1.000005
96500.0	13.1	-44.8			19.9	588.7				1.000004



STATION ALTITUDE 4254.00 FEET MSL  
 16 APR. 80 0800 HRS MS:  
 ASCENSION NO. 108

MANDATORY LEVELS  
 1070030105  
 JALLEN

GEODETIC COORDINATES  
 33.16712 LAT DEG  
 106.49511 LON DEG

TABLE 12

PRESSURE GEOPOTENTIAL MILLIBARS	FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	WIND DATA	
				DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	5034.	15.5	23.	358.0	5.1
800.0	6713.	13.5	22.	352.8	10.6
750.0	8485.	10.1	24.	7.5	14.5
700.0	10348.	4.9	28.	353.6	12.5
650.0	12312.	-2.2	31.	303.2	10.8
600.0	14391.	-6.4	36.	285.3	12.1
550.0	16594.	-12.8	35.	288.9	10.7
500.0	18960.	-17.6	18.	294.8	21.7
450.0	21522.	-23.3	17.	297.0	27.2
400.0	24305.	-31.3	18.	288.2	26.8
350.0	27358.	-39.0	5.**	300.8	29.1
300.0	30785.	-44.6		286.5	27.5
250.0	34740.	-50.8		271.4	37.2
200.0	39468.	-52.1		275.4	40.1
175.0	42288.	-55.4		273.1	44.8
150.0	45490.	-58.9		277.0	51.8
125.0	49206.	-62.0		280.8	51.5
100.0	53739.	-62.1		290.9	38.5
80.0	58254.	-65.3		307.4	23.1
70.0	60908.	-66.3		301.4	15.9
60.0	64027.	-61.0		224.9	10.7
50.0	67733.	-60.3		308.7	6.1
40.0	72336.	-57.9		34.4	6.9
30.0	78272.	-57.0		91.4	8.6
25.0	82071.	-55.6		89.9	9.6
20.0	86783.	-50.6		82.4	12.2
15.0	92990.	-46.7		111.2	10.4

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.